DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020680 Address: 333 Burma Road **Date Inspected:** 19-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

> 34-0006 **Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for observations relative to the work being performed.

Bay 10

Bridge No:

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Guo Tam Fei

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG Bike Path

PCMK: BK007A2-001

Weld No: 008,013,014,015,017,019,021, Welders: 040533, 040434, 053864

WPS-B-T-2132-ESAB

This Caltrans QA Inspector during random observation at ZPMC noted that back gouging was being performed using the Carbon Arc Cutting (CAC) process on Bike Path section BK008A1-001 weld number 043. Also noted at this location was ZPMC grinding these back gouge areas to a bright metal finish in preparation for the welding process as outlined in the contract documents.

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Bay 14

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Submerged Arc Welding (SAW) process.

ZPMC QC is identified as Wang Xiang Ping. AB Fluor QA identified as Ji Cai Jamg (Jim).

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 13A-001

PCMK: SEG3014 Weld No: 006.016 Welder: 250050

WPS-B-T-2221-B-L2C-S-2

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Wang Xiang Ping. AB Fluor QA identified as Ji Cai Jamg (Jim).

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 13A PCMK: SEG3014

Weld No: 006,016

Welders: 067876, 066734 WPS-B-T-223(2)1T-ESAB

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Wang Xiang Ping. AB Fluor QA identified as Ti Cai Jang (Jim).

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 13BW

PCMK: SEG3014 Weld No: 001

Welders: 067611, 037780 WPS-B-P-2213-B-U2-FCM-1

Components; OBG PCMK: SEG3020M

Weld No: 004 Welder: 045246

Repair Number: WR19827

WPS-345-SMAW-3G(3F)-FCM-Repair

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This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Wang Xiang Ping. AB Fluor QA identified as Ti Cai Jang (Jim).

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG PCMK: SEG3013AX

Weld No: 169,170,174,182,183,187

Welders: 063445, 066239 WPS-B-P-2233-ESAB

Components; OBG 14E Panel Point 127 (see photo below)

PCMK: AP3005, AP3006, AP3007

Weld No: "Buttering" Welder: 044824

Repair Number: WR20061

WPS-345-FCAW-1G(1F)-ESAB-Repair

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhong Guo Hai. AB Fluor QA identified as Yu Jiao.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 14E PCMK: SEG3019BB

Weld No: 037

Welders: 215553, 216086

Critical Weld Repair: CWR2737

WPS-345-SMAW-2G(2F)-FCM-Repair

Components; OBG 14E PCMK: SEG3019BB Weld No: 009,010,031,032

Welder: 067571

WPS-B-P-2213-B-U2-FCM-1

Components; OBG 14E PCMK: SEG3019A

Weld No: 001 Welder: 066416

Weld Repair No. WR19896

WPS-245-SMAW-1G(1F)-FCM-Repair

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Components; OBG 14E PCMK: SEG3019V Weld No: 029

Welder: 067656

Weld Repair No. WR18912 WPS-B-P-2213-B-U2-FCM-1

This QA Inspector observed the following work in progress for Bay 14.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhong Guo Hai. AB Fluor QA identified as Yu Jiao.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components; OBG 14E PCMK: SEG3019P Weld No: 162,163 Welder: 966733 WPS-B-P-2233-ESAB

Components; OBG 14E PCMK: SEG3019AG Weld No: 005,006 Welder: 066763

WPS-B-P-2233-ESAB

Components; OBG 14E PCMK: SEG3019AG

Weld No: 007 Welder: 037723

WPS-B-P-2233-ESAB

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By: Leavitt, Kelly Quality Assurance Inspector **Reviewed By:** Riley,Ken QA Reviewer